Windows 8 Consumer Preview

Product guide

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Windows reimagined

The new Windows 8 Consumer Preview Start screen

Welcome to the Windows® 8 Consumer Preview. Windows 8 has been reimagined to focus on your life. The beautiful, fast, and fluid design is perfect for a range of hardware: from compact, touch-enabled slates and lightweight laptops, to large, powerful all-in-ones with high-definition screens. It's smooth, intuitive, and gives you instant access to your people, apps, and stuff, so you spend less time searching and more time doing.

You'll love browsing through the Windows Store and downloading apps to help you work more efficiently, or install the latest games and compete with friends. Apps can work together, too, so you can share photos, maps, contacts, links, and whatever else you want faster and easier.

No matter what task you want to complete, Windows 8 helps you get it done quickly. It's fast—whether you're completing a project or playing a game. Windows 8 starts quickly and uses less memory so there's more room for your apps and data. Windows 8 is cloud-connected so you can access your photos, documents, and settings from wherever you are, on any Windows 8 PC.

Windows 8 has the flexibility you need. You can use a touch screen or a keyboard and mouse, and you can switch anytime.

Windows 7, only better

Behind the bold, new look of Windows 8, is the rock-solid foundation you've come to expect from Windows® 7. Immerse yourself in the exciting features of a new generation of PCs while enjoying the full power of Windows. In addition to the sleek, new look of the Start screen, Windows 8 incorporates the desktop that you're already familiar with. In the desktop, you'll see that the settings, devices, and features you used in Windows 7 are still there. You can run older apps, too.

And just like Windows 7, security and reliability is built into Windows 8. Everything that was great about Windows 7, we made even better.

Beautiful design

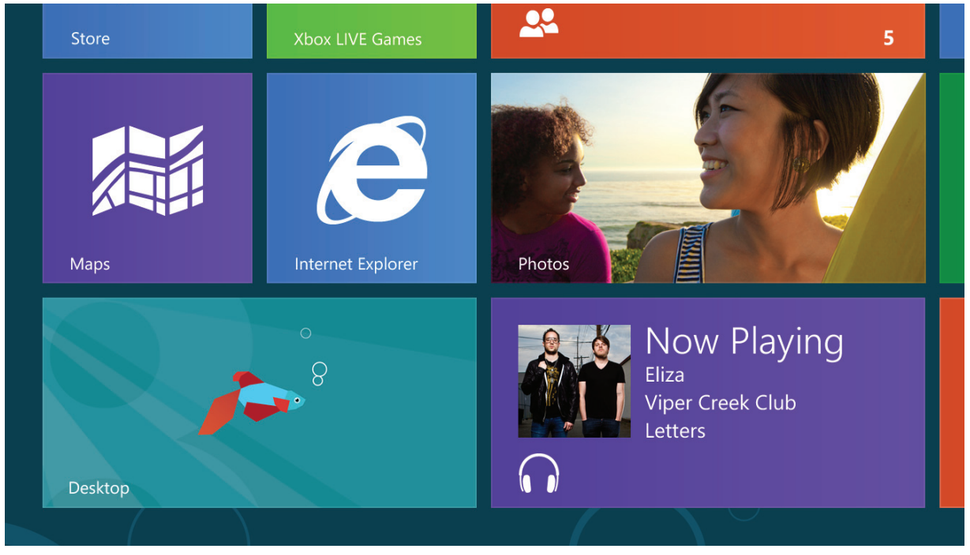
Windows 8 has a bold new style that's sleek and modern, and it's been beautifully designed. From the clean look of the words on your screen to the way apps animate, the experience is new and the way it works is intuitive, so you can get started right away.

The new Start screen

The new Start screen has all of the information you care about in one place, such as your contacts, the weather, and the next appointment on your calendar. Windows 8 is truly yours: websites, playlists, photo albums, contacts, and your favorite apps are front and center. Because you decide how to organize and group things on the screen, viewing and interacting with content is faster than ever.

The tiles on your Start screen are brimming with content, and they change and update in real time so you can see what's going on and stay on top of things. You can share and connect with other people in a couple of clicks, and get real-time updates about things like news, sports, and what your friends are up to. Check your schedule or get the latest weather forecast—all without searching for information. Tiles are a quick way to see it all. Launch apps, switch between tasks, and check notifications without digging for information. It's all right here on the Start screen.

Windows 8 also incorporates the PC desktop that you're already familiar with. In the desktop, you'll see that the settings and features you used in Windows 7 are still there.

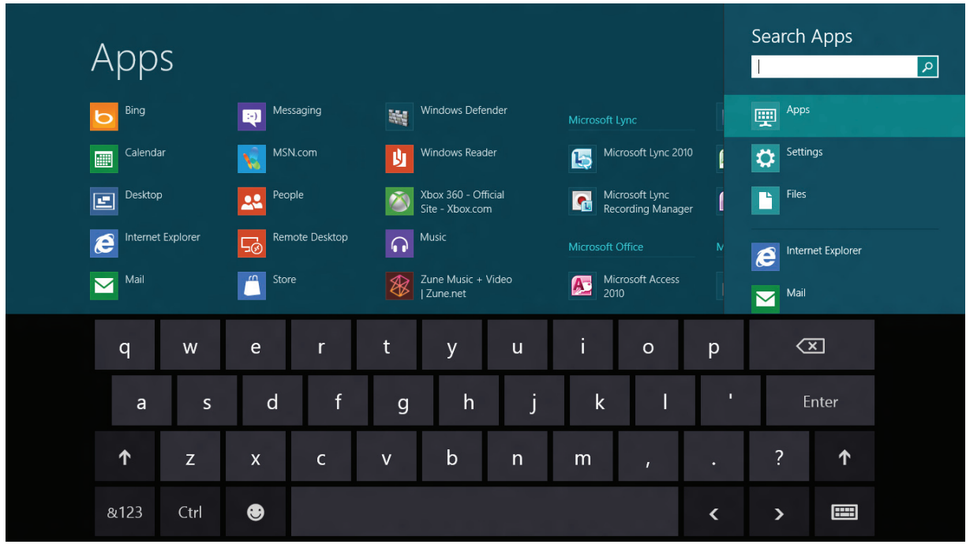


Click the Desktop tile to get to the familiar Windows desktop

Touch or keyboard and mouse: your choice

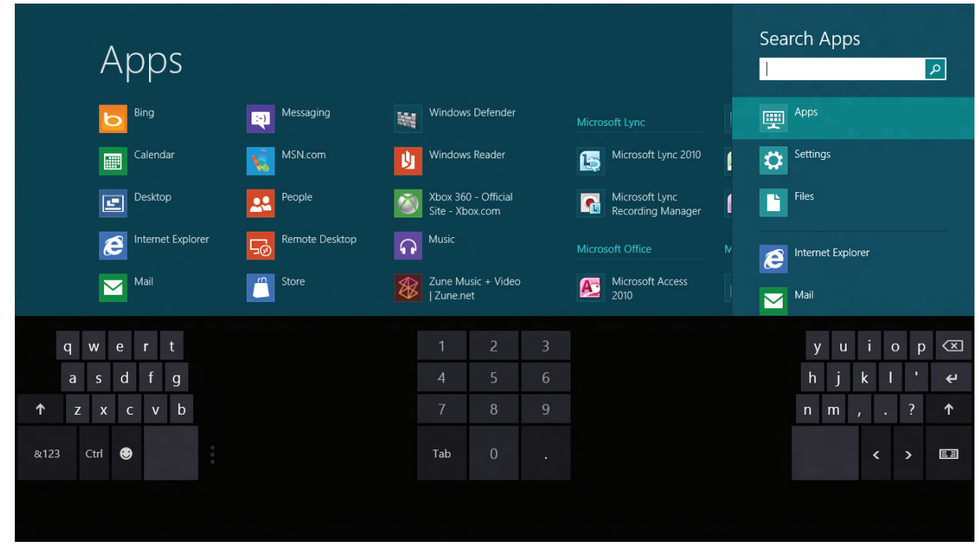
Windows 8 is hands-on. On touch-enabled PCs, the things you used to do with a mouse and keyboard are now easy to do with touch. You can switch between apps, organize your Start screen, and pan and zoom. With the innovative touch keyboard, you can navigate, type, and interact on the go.

The touch keyboard has two modes designed to suit the way you work. It's a full-sized touch keyboard with large buttons that converts to a unique thumb keyboard so it's easy to use when you want to take it with you. This flexibility makes it more comfortable. Typing feels natural whether you're sitting down or walking around.



Type naturally with the touch keyboard

The touch keyboard in Windows 8 helps you speed up your typing and makes it more accurate. The keyboard technology is designed to increase efficiency and reduce mistakes. If you mistype a word, Windows will suggest words as you type so you can get it right with a single tap.



The innovative thumb keyboard makes typing on portable devices easier

The Windows 8 keyboard speaks your language. On touch-enabled PCs, the keyboard layout automatically adjusts to the language you choose for Windows. Your language settings apply to the whole PC rather than just certain apps, so you can communicate effectively right from the start.

Windows 8 is equally at home with a mouse and keyboard. You can choose how to interact with your PC. Plug in a keyboard and mouse and you have familiar methods of getting to your apps. People work in different ways and Windows 8 adapts to your needs. So whether you want to type and click, or swipe and tap, you can navigate easily with Windows 8. The choice is yours.

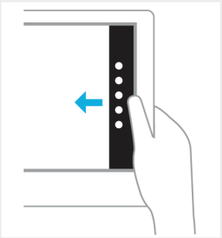
The new language of touch

On touch-enabled PCs, Windows 8 touch interactions let you manipulate the things on your screen in a way that feels comfortable. Here are a few common Windows 8 gestures.

Swipe from the right or left edge for system commands

Swiping from the right side of the screen reveals the charms with system commands.
Swiping from the left brings up previously used apps.

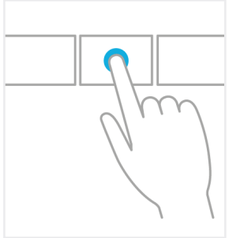
Mouse equivalent: Place the mouse pointer in the lower-right corner of the screen



Press and hold to learn

You can see detailed information without having to commit to an action. In some cases, pressing and holding opens a menu with more options.

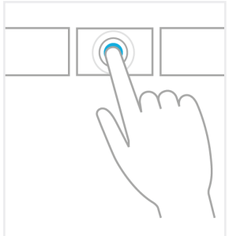
Mouse equivalent: Hover over an item to see more options.



Tap to perform an action

Tapping something causes an action, such as launching an app, following a link, or performing a command.

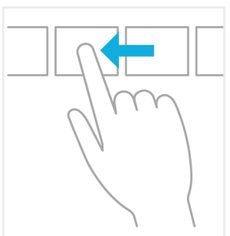
Mouse equivalent: Left-click on an item to perform an action.



Slide to drag

This is mostly used to pan or scroll through lists and pages, but you can use it for other interactions too, such as moving an object or for drawing and writing.

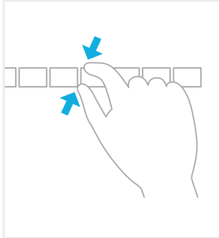
Mouse equivalent: Click, hold, and drag to pan or scroll. Also, when users use a mouse and keyboard, a scroll bar appears at the bottom of the screen to enable horizontal navigation.



Pinch or stretch to zoom

Zooming provides a way to jump to the beginning, end, or a specific location within a list. You can start zooming by pinching or stretching two fingers on the screen.

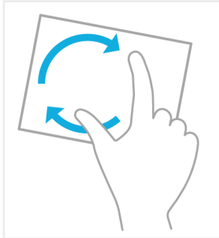
Mouse and keyboard equivalent: Hold down the control key on the keyboard while using the mouse wheel to grow or shrink an item on the screen.



Rotate to turn

Rotating two or more fingers turns an object. You can turn the whole screen by 90 degrees when you rotate your device.

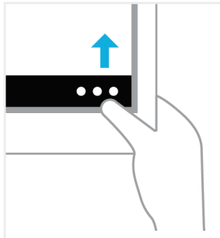
Mouse equivalent: Support for rotating an object depends on whether the specific app supports it.



Swipe from the bottom or top edge for app commands

App commands are revealed by swiping from the bottom or top edge. Swiping from the top to the bottom of the screen lets you dock or close the current app.

Mouse equivalent: Right-click on the app to see the apps commands.



All the apps you want

Apps are the heart of Windows 8. From the moment you first use Windows 8, you'll have a set of built-in apps for the things you do most. Beautifully designed for your highly-connected lifestyle, these apps integrate with the services you already use.

Use built-in apps for the things you do the most

With Windows 8, your entire PC is cloud-connected. You'll have new Mail, Calendar, Microsoft SkyDrive®, Photos, People, and Messaging apps that are connected to the services you use, just by adding them to your Microsoft account.

Mail allows you to see all of your mail in one place, whether it's Hotmail, Gmail or your company's Exchange mail.

Just like the Mail app, **Calendar** combines your information into a single view and enables you to have one view of the day, week or month, by pulling together your multiple calendars.

With Microsoft **SkyDrive®** you never need to worry about being able to access your documents and photos because when they're in your SkyDrive, you can access them seamlessly from any device.

Photos puts your pictures at your fingertips. Your albums from Facebook, Flickr, and Microsoft SkyDrive®, and of course your PC, are there when you connect your Microsoft account to these services.

The **People** app is your most complete address book. You can include contacts from Hotmail, Messenger, Facebook, Twitter, LinkedIn, Gmail, and others. Quickly see what's new, share an update, comment, or initiate a conversation.

Messaging makes it easy to chat with all your friends on Messenger and Facebook.

Apps work together

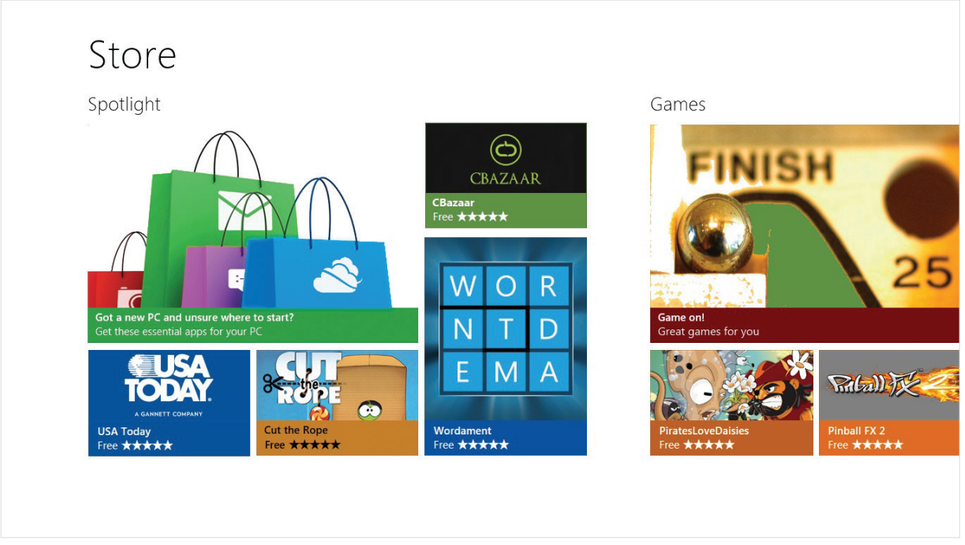
Windows 8 makes it easier for you to do the things you love because it allows apps to work together so you can share information between them. In the Photos app, select a picture from an album and email it to your one of your contacts using the Mail app. Even better, Windows 8 enables any app—if you so choose—to have the power to consume your content in Microsoft SkyDrive®, lets you share with any of your contacts in the People app, and makes it easy to send mail to anyone you know.

The more apps you have, the more you can do. For example, without any apps, searching in Windows 8 will search only files and settings. With your personal set of apps installed, the search will include the content in your apps, so you can find books on Amazon, movies on Netflix, information on Bing, and more. You can watch, buy, or explore in ways that work for you. So go ahead and add a lot of apps. The more you add, the better they work together.

Windows Store

With the new Windows Store, you'll be able to browse and compare thousands of apps, all grouped in easy-to-find categories. They'll be organized in the Store in a way that makes them easy to find the ones that interest you. We highlight great apps, provide quick access to frequently downloaded apps, and show you how other people have rated apps. You'll always know what's interesting, new, and popular.

All of the apps you'll see in the Store for Windows 8 Consumer Preview are free. After Windows 8 is available, there will also be lots of apps that you can buy at different price points. You won't have to worry about buying something you don't want because you can try before you buy, if the app supports it. If you try an app and like it, you can buy it seamlessly and continue using the full app. You won't waste time or lose your place.



You can choose from a variety of apps in the Windows Store

After you decide, you can buy with peace of mind because before an app makes it to the Windows Store, it's screened and checked for viruses.

You can download your apps on more than one Windows 8 PC so there's no need to buy it twice. That's because after you install an app from the Windows Store, you can sign in to the Store on up to five other PCs and see a list of all of the apps you own. You can pick and choose the apps you want to install on other PCs without having to search for and install them individually.

Designed for discovery

The Windows Store is designed to make it easy to discover apps without getting lost. The apps take center stage. Tools like Search, Category browsing, and lists of top apps help you find the apps you want. Landing pages spotlight compelling apps, and categories like New releases, Top paid, Top free, and Rising stars help organize the catalog. Editors' choices highlight new and different great apps every week.

An unprecedented opportunity for developers

Windows 8 represents the single biggest platform opportunity for app developers. The business terms of the Windows Store represent a developer-first point of view. You get access to millions of potential customers around the world, development choices that let you use the skills you already have, rich platform capabilities for building Metro style apps, business terms that maximize your revenue opportunity, and flexible business models for the apps you create. Windows 8 and the Windows Store provide an unprecedented opportunity for you to imagine, build, and sell your apps.

Windows 8 is cloud-connected

Sign in to your Windows 8 PC with your Microsoft account and you're immediately connected to the people, files, and settings you care about. Your PC comes to life with all the things that make Windows yours, including your Start page, themes, language preferences, and browser favorites. You can connect your favorite services to your Microsoft account, too—services like Microsoft Hotmail, Microsoft Messenger, Facebook, LinkedIn, Twitter, and more. And you can immediately get to your photos, docs, and other files, whether they're on Microsoft SkyDrive®, Facebook, Flickr, or other services.

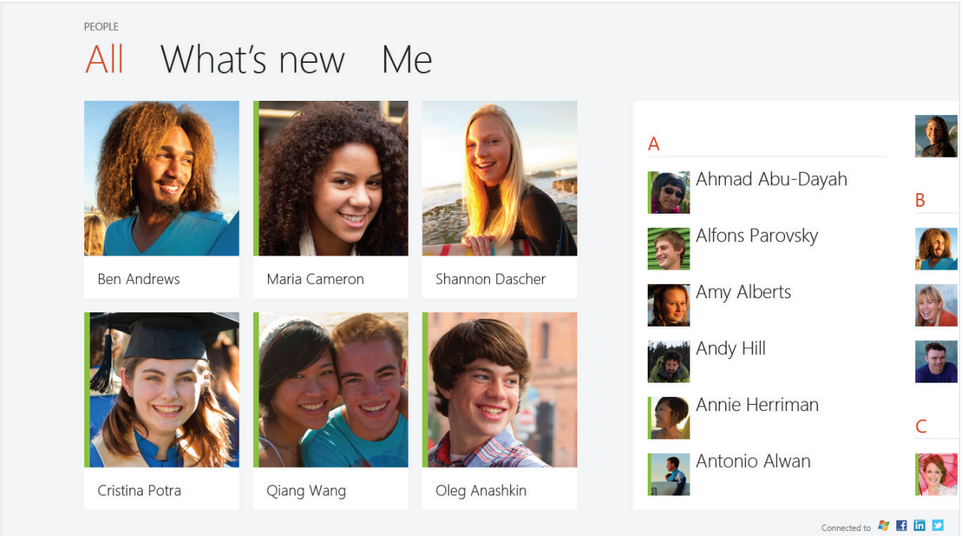
Your Windows everywhere

Sign in and your device is instantly alive because your personalization, desktop background, and settings are all there. Whether you set it up perfectly for you or change it often, when you sign in, even a brand-new PC lights up with everything that makes Windows yours. Anyone you share a PC with can have a personalized, cloud-connected experience through their own Microsoft account. Windows 8 gives you a seamless experience between your devices and your personal cloud services.

Start a project on one PC, and finish it on another. When you use the cloud to store your information, the boundaries between devices dissolve. Your apps, games, music, photos, files, and settings aren't stored on one device, they're in one place: the cloud.

Connected to your people

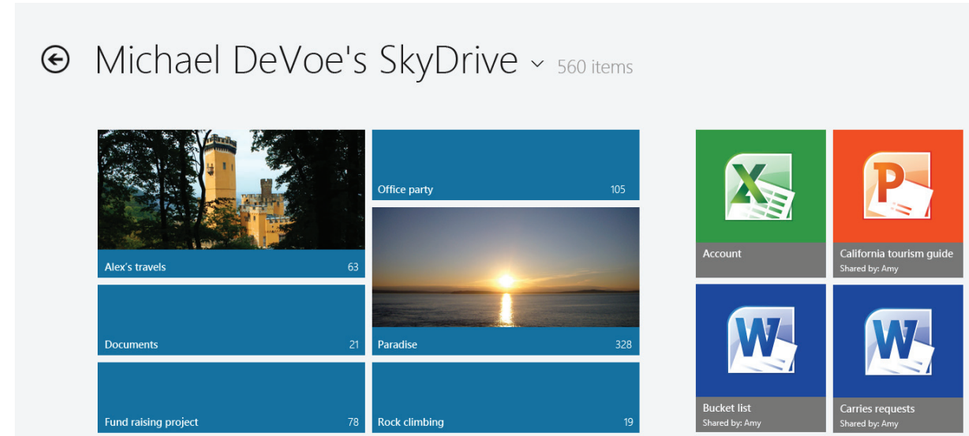
Use mail and messaging apps to communicate with all your friends, family, and coworkers. And you won't need to invite them twice. If you have contacts all over the place, you're in luck because whether you originally added a contact in Hotmail, Messenger, Facebook, Twitter, Gmail, or some other service, if you choose to connect them, that contact is available in your apps as soon as you sign in to your Microsoft account. You can have a fully connected address book with the People app. See the people you care about, their updates, and all the different ways to communicate and share with them—all in one place. And you won't have to worry about losing your contacts. If you get a new Windows 8 PC or Windows Phone, the People app is your most complete address book.



The People app keeps you connected to the ones you care about

Connected to your files

Your Microsoft account is like a portable, personal PC that appears on any Windows 8 device you're using. You'll be ready to pick up where you left just by signing in. Here's another reason to put files in the cloud: with an Internet connection, photos and other files on Microsoft SkyDrive® are essentially as accessible as anything on your PC, and you can access them from any web-connected device.



SkyDrive and an Internet connection give you access to practically everything on your PC

Connect your apps to the cloud

Developers can take advantage of the services Microsoft provides so their apps will light up when they're connected to the cloud. When developers connect apps to the cloud using the Live SDK, they can take advantage of single sign-on, which gets users even deeper into their app experience because they'll be able to more easily store data and communicate with their friends and family.

Windows on a wide range of hardware

Touch devices are convenient and fun, but they don't always have all the features you need. With Windows 8, you don't have to choose between a touch device and a PC because you can have it both ways. Prefer a mouse and keyboard? Go right ahead—Windows 8 will run on amazing hardware, from tablets to laptops to all-in-ones with large, high-definition screens. Whether you like to stay put or work on the go, you can enjoy the power, convenience, and versatility of Windows.

Longer life

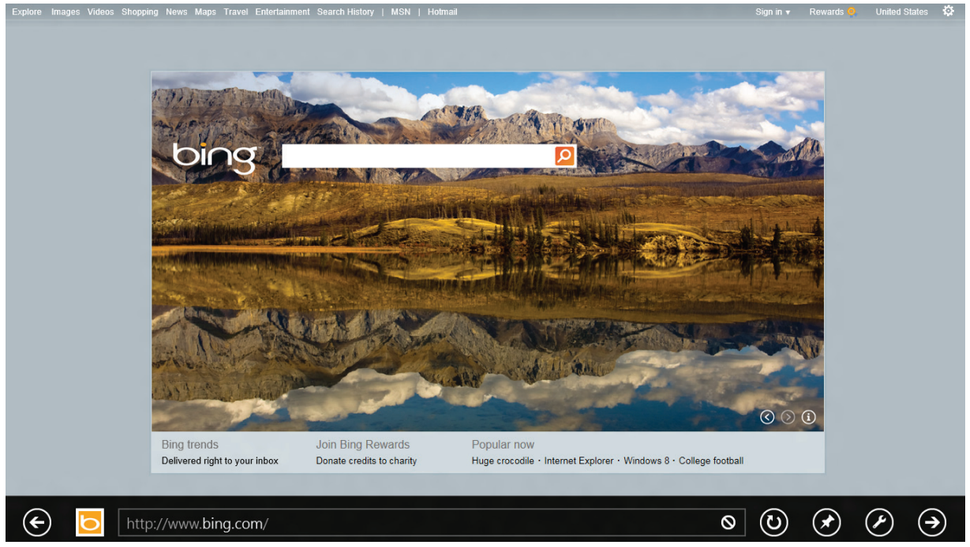
Power requirements in Windows 8 are lower, data transfer is faster, and Bluetooth LE delivers low-power wireless connectivity for longer battery life. Lower power requirements are also helped by the growing number of energy-efficient devices that use Wi-Fi Direct to provide connectivity between PCs and devices.

With the new class of ultrathin PCs and tablets that turn on quickly, you can run much longer on a single charge than with older hardware. That means you can stay connected so your PC is ready when you are. Battery life is longer and connections are stronger. You'll be able to find a device to suit you for work or play.

From mobile slates to powerful all-in-ones, Windows 8 is available on a range of hardware

Internet Explorer – reimagined for Windows 8

With Windows® Internet Explorer® 10 Consumer Preview we reimagined the browser to create a new experience designed specifically for your Windows 8 device. It provides an edge-to-edge, fast, and fluid experience that's all about less browser and more web.



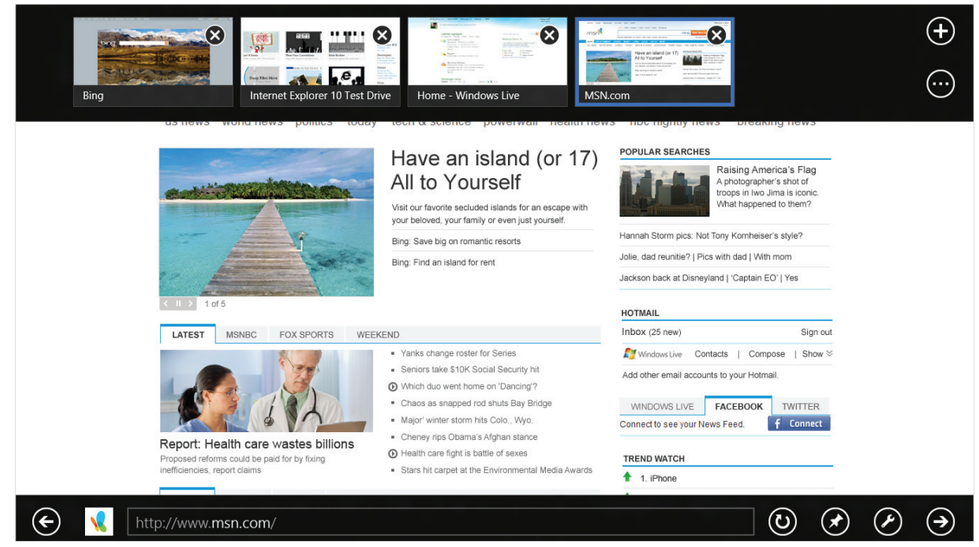
Internet Explorer 10 puts your websites front and center

Less browser, more web

Internet Explorer 10 Consumer Preview is the only browser to dedicate your entire screen to your websites. The web is literally edge-to-edge. There only when you need them, browser tabs and navigation controls appear and then quietly get out of the way when you don't want them anymore.

Fast and fluid

With Internet Explorer 10 Consumer Preview, the web is fast. By taking advantage of Windows 8 and your device's hardware, browsing with Internet Explorer is as fast and fluid as everything else on your Windows 8 device. Every navigation, every action you want to do on the web, is a swipe or a tap away, and it all feels instant. And with the continued innovations around hardware acceleration, Internet Explorer allows web developers and designers to build increasingly rich and immersive web experiences that run as fast as built-in apps on your Windows 8 PC.



All of your open sites in one convenient location

A more trusted web

Internet Explorer 10 Consumer Preview continues to provide a trusted browsing experience, helping to keep you safe from the real-world security and privacy concerns that come with the modern web. Building on the security platform of Windows and harnessing SmartScreen® Filter, Internet Explorer is recognized as a leader in socially-engineered malware and phishing protection, and it will help keep you more secure when browsing the web. Internet Explorer gives you choice and better control over your online privacy with innovative Tracking Protection privacy controls.

Standards-based

Internet Explorer has one underlying platform that supports HTML5 and enables the same markup to work across many other modern browsers. And with extensive support for additional standards spanning HTML5, CSS3, and EcmaScript5, Internet Explorer 10 Consumer Preview provides developers a standards-based platform they can use to write increasingly rich and beautiful sites that are free of plug-ins.

Windows 8 for business

The way people work has changed dramatically during the last decade. People use technology in the home and at work interchangeably. They're mobile and expect access from anywhere. Technology at home is rapidly becoming central and people don't want to give up the convenience of their personal devices and services when they enter the workplace.

Focused on business and people

Built on the solid foundation of Windows 7, Windows 8 helps businesses unleash the full power of their employees while meeting their expectations of technology. With seamless connections to people and information, full-screen immersive apps, and built-in malware resistance, strong authentication, and data encryption, Windows 8 provides a great experience along with a more secure and manageable platform.

Businesses can create their own apps for Windows 8 that are immersive and enhance worker productivity. Critical line-of-business apps can benefit from an immersive full screen, allowing workers to easily interact with the app. Apps that support a snapped view allow workers to multitask between immersive applications.

Windows 8 helps bridge the gap between people who want a more personal and meaningful experience and IT Pros who want a more secure, manageable operating system.

Ready and productive practically anywhere

With Windows 8, it's easier for workers to get connected and stay connected. IT Pros can ensure that corporate data is safer and more secure. Great new features and enhancements mean that road warriors can take their Windows 8 computers with them, confident that the built-in Wi-Fi and mobile broadband solutions can help them stay connected whether they're on-site with a customer, waiting for a flight, or working from a branch office.

Built-in mobile broadband features in Windows 8 natively supports the 3G and 4G telecommunication that enable workers to connect to the Internet immediately. Windows 8 mobile broadband support can help businesses keep data usage costs low with built-in mobile broadband metering. As mobile workers move between locations, Windows 8 automatically uses Wi-Fi hotspots if they're available.

Windows To Go allows IT Pros to provide workers with secure access to a corporate operating system and apps in situations when a device or network is out of the IT department's control. Windows 8 includes the capability to provide users with a full corporate copy of Windows (along with a user's business apps, data, and settings) on a USB storage device. When users insert their device into any Windows 7 or Windows 8 compatible PC and restart the PC, they get their entire personal environment and can operate as a fully managed device. When they sign out, they can remove the USB device, and it's ready to use on another PC.

Windows Server 8 and Active Directory Domain Services allow remote users to more securely and seamlessly access resources inside of a corporate network through DirectAccess, without having to launch a separate connection, such as a virtual private network (VPN), to the corporate network.

Better data security

Sensitive data is an asset that needs to be controlled and managed. With strong checks to ensure that operating system components are kept safer, malware and other types of malicious software have much less of a chance to take over a PC than ever before.

Trusted Boot validates the integrity of Windows as it starts. Secure Boot requires UEFI 2.3.1 firmware, and it can be used to help prevent any malware from starting before the operating system is up and running. Antimalware is loaded in advance of all non-critical Windows components. This means that malware, such as rootkits, are less able to hijack the boot process or hide from antimalware software.

Measured boot validates, signs, and stores boot information in the Trusted Platform Module (TPM) chip. This enables a remote service to validate a computer's integrity. This process is called attestation.

BitLocker® drive encryption helps protect corporate data on mobile PCs that include a TPM chip. BitLocker now encrypts hard drives more quickly, helping to keep data safe without significantly interrupting worker productivity.

AppLocker® is ideal for businesses that currently use Group Policy to manage their Windows PCs. AppLocker is used to restrict the types of files that a user or a group is allowed to use. This helps protect users from inadvertently deleting or sharing sensitive corporate information.

SmartScreen® Services are a set of sophisticated technologies that help protect users from phishing and socially engineered malware attacks so they can browse the web with confidence. Additionally, when downloading a program from the web, SmartScreen uses reputation data to remove unnecessary warnings for well-known files and shows warnings when the download is at higher risk of being malicious.

Windows 8 provides a great opportunity for businesses to empower their workforce. With both new and improved features that support working remotely, easier management for administrators, and a natural and inviting user interface, Windows 8 can help workers be more productive and help keep data more secure.

Built on a solid foundation

Most people don't think about what's under the hood—and you certainly don't need to with Windows 8. You can rest assured that Windows 8 has the flexibility to meet your needs. It runs on different hardware systems, such as ultra-thin, ultra-light, and all-in-ones, so you can choose a device that suits you.

If you're used to working with apps like Microsoft Office and Adobe Photoshop, they'll run smoothly with the full power of Windows on the Windows 8 desktop. From there, all the familiar Windows 7 apps and devices are at your fingertips. It's just as efficient as Windows 7 and it's got the performance you expect from Windows.

Rock-solid

Windows 8 is built on the rock-solid foundation of Windows 7, but it's been improved on all fronts. You can install Windows 8 on the same hardware that powers Windows Vista and Windows 7, and you'll love how it works on new devices too. We've designed Windows 8 with Windows 7 apps in mind too because we know people often have older apps they need to use.

Speed. No matter what device you're using, you'll notice improved performance and system reliability. Even on lower-power systems, Windows 8 is responsive. Your PC starts quickly, battery life is longer, your apps run faster, and you're more secure from start to finish.

Compatibility. Getting going with Windows 8 is a breeze. Windows 8 automatically supports a wide range of devices, including printers, cameras, media players, and displays. It's designed so when you plug in your device, it works. If a device has a companion app and you've turned on device companion apps during setup, you'll receive the app automatically so you can share photos, connect with friends, and much more. And because Windows requires less memory, there's more room to run your apps.

Connected. Many apps are better when you're connected. Windows helps keep you connected by switching to the network with the best quality so you can have a great experience with your PC. Windows 8 provides a number of new features that makes it effortless to connect your PC to available networks and keeps you connected as you change locations. Windows 8 connects to one network at a time and prioritizes networks that are typically less expensive and faster (for example, Ethernet over Wi-Fi over WiMAX over mobile broadband). Windows also automatically switches you from a lower-prioritized network to a higher-prioritized network if one becomes available.

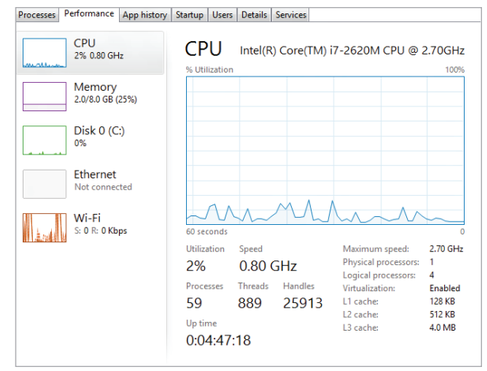
Better Protected. Windows Defender provides antimalware protection so you can be more secure from start up to shut down. It monitors and helps protect your PC against viruses and other malware in real time and detects and removes malware if your PC becomes infected. Windows 8 provides new ways for antimalware software to reduce its impact on system performance. Windows 8 works together with antimalware software to help keep your PC safe.

More for power users

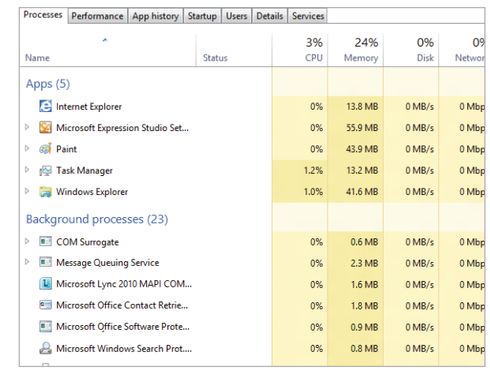
If you want to push the limits of your PC experience, we've invested in the features most often used by power users. The new, flexible options help you use your PC efficiently and quickly.

File management. Windows Explorer is enhanced to make file management and navigation straightforward. The ribbon organizes Windows Explorer and reveals features that used to be hidden. We've brought back a long-lost favorite: the Up button. It's easier to view and manage all of your file operations in one place.

Task Manager. The new Task Manager is a handy dashboard that you can use to monitor and control your PC so you always know what's going on. Color-coded tiles present information in a way that's easy to understand. You can keep track of resources efficiently and in real-time with graphs and details about processes, apps, and history.

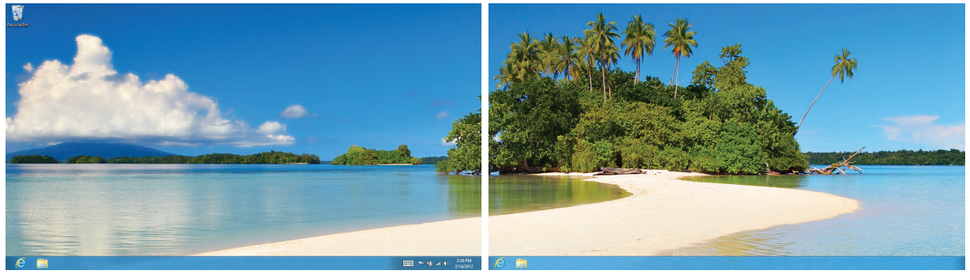


Easy-to-read data about your PC's performance



Straightforward app management

Multiple monitors. If you're one of the many people who use multiple monitors, you'll find it more flexible than ever. With many types of hardware, you can display the Start screen on one monitor and the desktop on the others. Desktop backgrounds can be different on each monitor or can stretch across your screens.



Windows 8 Consumer Preview works seamlessly with multiple monitors

Restore. Windows 8 comes with a number of options to restore your PC. You can refresh your PC, which keeps all your documents, accounts, personal settings, and apps but returns Windows to its original state. If you want to completely reset your PC, you can restore your PC to the state it was in when you first got it. You can create a reset disk, too, which is great for power users who've invested time to personalize and configure their PCs. Restoring from USB drive is a good option if you have a tablet without a disk drive or you just want to save space and have a convenient backup tool in case your hard drive is damaged.

Windows Update. Windows 8 keeps your PC up to date while staying out of your way. If you turn on Windows Update during setup and your PC needs an update, Windows can install it when you're not using your PC or at a time you've specified. When an update requires you to restart your PC, we've given you more time to act on it—so you can pick a time that works for you. That means you'll see fewer prompts about maintenance, updates, or restarting. You won't be slowed down by interruptions, and your PC will keep performing well.

Developing for Windows 8

If you're a developer, Windows® 8 Consumer Preview gives you an amazing platform to reach the millions of people around the world who use Windows every day to be more productive and creative, and to have fun. With Windows 8 Consumer Preview, you have unprecedented access and opportunity to reach that worldwide customer base early. Windows 8 represents the most significant platform opportunity available to developers, with a chance to reach millions of people with your amazing Metro style apps.

Apps are at the center of the Windows 8 experience. They're alive with activity and vibrant content. Users are immersed in your full-screen, Metro style apps, where they can focus on their content, rather than on the operating system.

Signing up to sell your app in the Windows Store means you can tap into the worldwide user base of Windows, even at the Consumer Preview stage. You'll draw from a wealth of new tools and services, including updated versions of Microsoft® Visual Studio® Express, Microsoft® Expression Blend®, an optimized Windows 8 SDK, and personalized app telemetry data, so you can develop and deploy apps faster and more profitably.

With Windows 8, you can leverage your existing skills and code assets to create Metro style apps for your customers.

- Web developers can use their HTML5, CSS3, and JavaScript skills, as well as their experience with third-party JavaScript libraries.
- Microsoft® .NET Framework and Silverlight® developers can use their XAML, C#, and Visual Basic® skills.
- Developers looking for maximum performance for their games and other graphics-intensive apps can use the power of Microsoft® DirectX® 11.

With Windows 8, you're ready to imagine, build, and sell the next great app to the entire world.

Apps take center stage

Windows 8 makes it easy to build full-screen Metro style apps that are fun to use and explore. Flexible and easy-to-use controls, built-in animations, and layout options make your apps feel fast and fluid. Live tiles on the Windows Start screen display information from your website or service and help ensure your app is useful—even when it's not running. When users acquire additional apps, their experience is enriched when those apps participate in app contracts. For example, when an app implements the Search contract, users can search its content from an unrelated app. Users can also choose to share content from one app to another. And apps can be optimized to the user's context, hardware, and preferences.

Metro style app principles

More than just an app platform, Metro style is a design philosophy that helps you build attractive, easy-to-use apps that will delight your customers with their intuitive and common interaction model. Some principles common to great Metro style apps include:

Fast and fluid. User interactions and transitions are quick and intuitive, and animations are deliberate and purposeful.

Support for multiple states. Metro style apps support a full-screen, immersive state, and a minimal, snapped view that runs while a second app takes up the majority of screen space.

Support for the right contracts. App contracts provide a way for apps to work together that lets users search across apps or choose to share content from one app to another. Their experience improves as users add more apps that support contracts to their PC.

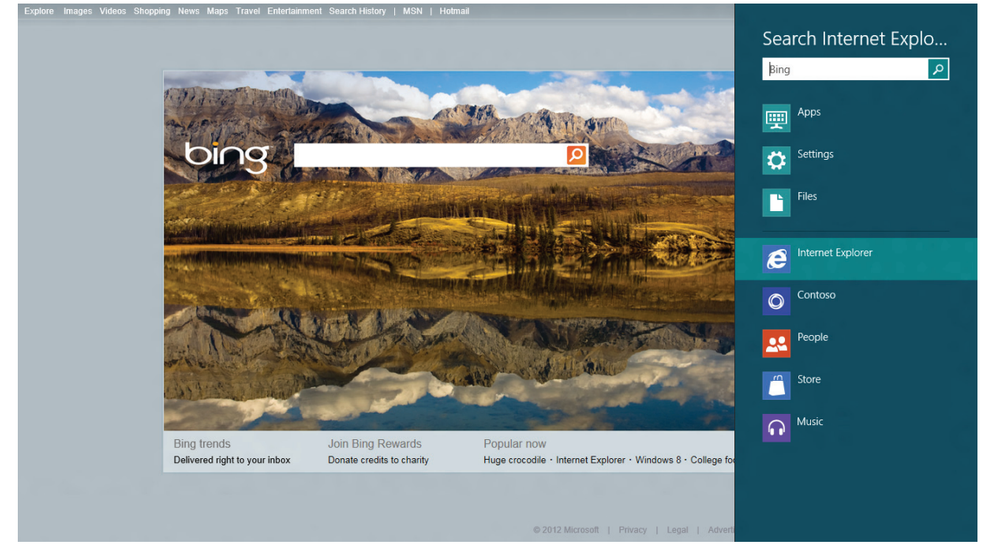
Live tiles. Useful information appears on the app's tile on the Start screen even when the app isn't running.

Settings and data roam through the cloud. Users get a great experience, regardless of where they sign in.

Embracing these principles makes your app more usable, increases its visual appeal, and helps you deliver an experience that's consistent and familiar to your users.

App contracts

App contracts are a way for users to seamlessly search across and share content between unrelated apps. They extend the usefulness of your app by eliminating the need to work with varying standards or app-specific APIs to access data stored or created by another app, all while keeping users in your branded experience. You don't need to know anything about the target app other than its declared support for the target contract – it just works.



Users can search the content in your app and all other apps that support the Search contract

Windows 8 provides support for several contracts, including:

Search. When you implement the Search contract, users can search not only your app's content but content from other apps that participate in Search as well.

Sharing. The Share contract lets you help users share content from your app with another app or service, and vice versa, if the user chooses to do so.

PlayTo. You can help your users play digital media through connected, DLNA-certified devices from within your app by supporting the PlayTo contract.

App to App picking. Lets users pick files from one app directly from within another app.

Settings. Lets you provide quick, in-context access to settings that affect the user's app experience, including whether your app can access the user's location

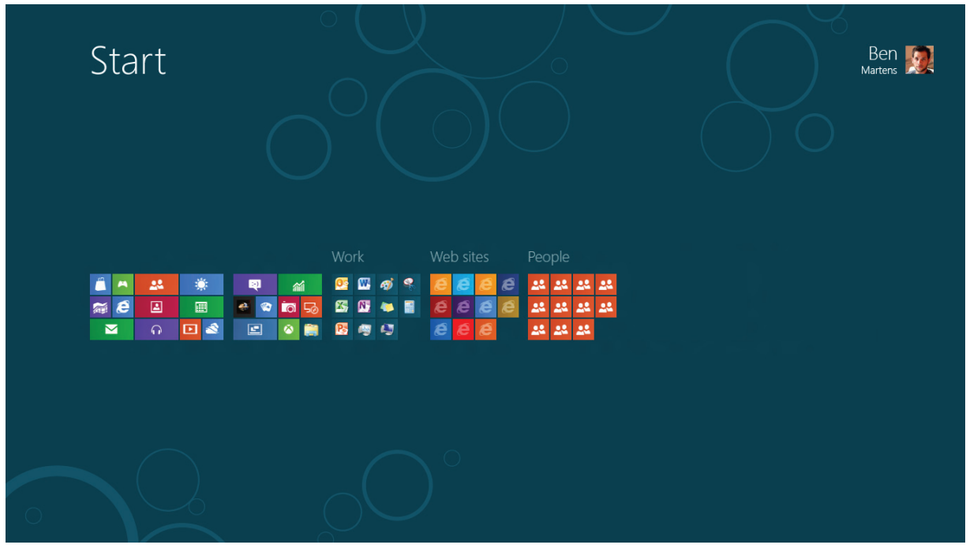
Fast and fluid

With Windows 8, we created a touch-optimized platform that you can interact with in an intuitive way. As a result, interactions with the operating system and UI elements feel natural and responsive. Animations and transitions are used deliberately, and effects are subtle and designed to enhance the connection between you and the PC. App layout and presentation are simplified with easy-to-use layout APIs and presentation controls

The built-in animations library lets you create smooth, animated experiences from a comprehensive set of predefined animations that are lively and unique. With 3-D transformations you can add smooth, fluid, visual experiences like perspective transforms and flipping elements on and off the screen.

Flexible layout makes app layout easy and consistent with Windows 8 because it supports multiple layout modes. FlexBox lets you create containers that expand proportionally to fill any remaining space in a layout. Grid layout gives you the ability to position and size content elements into cells on a grid structure that you define with fixed, fractional, or automatic units. Multi-Column Layout mimics newspaper and magazine layouts.

Semantic zoom is a touch-optimized way to navigate through large content collections. Users can pan or scroll through their content, and then zoom in or out to view more or less information. This lets apps present content in a more tactile, visual, and informative way than traditional navigation and layout patterns like tabs.



Semantic Zoom helps you navigate large content collections

Tailored experiences

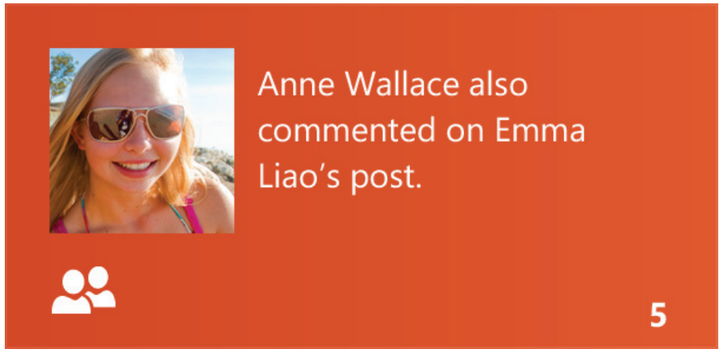
Building experiences that take full advantage of the latest hardware is easy with Windows 8. Sensor APIs help you build apps that are tailored to the user's context, and apps scale gracefully to support both compact and large form factors.

The Windows 8 sensor platform is an end-to-end solution that includes support for both desktop and Metro style app development. The Win32 API lets you integrate sensor data without writing a lot of code. Windows Runtime Components let you quickly access input from eight sensors, including accelerometer, geolocation, inclinometer, gyrometer, compass, ambient-light, orientation, and simple orientation of a device.

Windows 8 scales apps to ensure consistent physical sizes for UI elements regardless of the pixel density of the screen. As a developer, your work is minimal—just provide scalable resources and Windows takes care of the rest.

Tiles are connected and alive

Through tiles on the Start screen, apps are alive with activity and can deliver vibrant content, even when they're not running. Using live tiles, your app can provide useful, at-a-glance data to the user, while minimizing battery usage. Windows Push Notification Services (WNS) enables your app to receive messages and send them to your app's live tile or provide a notification to the user.



Live tiles bring your app to life, even when it's not running

Build apps using what you know

Windows 8 lets you build Metro style apps using a variety of programming languages and tools. You can program your apps using C#, C++, or Visual Basic, while using XAML to declaratively describe the user interface. Or you can build apps using web technologies like HTML5, CSS3, and JavaScript. Developers looking for the best possible performance on Windows 8 can use Microsoft® DirectX® 11.1 with C++.

Extensible and compatible with existing frameworks

The new Windows 8 app models feature native extensibility, which you can use to build your own reusable component libraries. You first build your own custom components with C++, C#, or Visual Basic and compile them as portable libraries. Then, you can use any supported language to call these components from your apps.

The Windows Runtime (WinRT) is a straightforward set of APIs used to build Metro style apps. WinRT APIs are available to you in all supported languages, including JavaScript, C++, C#, and Visual Basic. WinRT APIs are accessible to other Microsoft programming frameworks, like the .NET Framework or Windows C Runtime Library. Traditional Windows desktop apps can also access a subset of the new WinRT functionality, in addition to the proven Win32 and .NET APIs.

Metro style apps with HTML5 and JavaScript take advantage of powerful advancements in standards-based web technology. It's now possible to build fully native Windows apps with the simplicity and flexibility of standards-compliant HTML markup, JavaScript, and CSS3 using the new Windows Library for JavaScript. Microsoft® Visual Studio® 11 Express for Windows 8 provides access to an extensive library of application templates to streamline and accelerate app development.

XAML lets you carry all of your knowledge forward in C#, Visual Basic, and C++. If you're familiar with Silverlight® or WPF, you'll be right at home with Windows 8 development. The new Windows 8 controls have been fully implemented in XAML, enabling you to build user experiences with the new Windows personality

DirectX graphics are at the core of Windows 8. You have several options when creating Metro style games. You can write full-screen, chrome-free games with smooth, flicker-free action using HTML5, JavaScript, and CSS3. Or, write impressive 2-D and lightweight 3-D games using XAML with managed C# or Visual Basic. You can also take advantage of the full processing capabilities of modern graphics hardware using native C++ and HLSL with DirectX® 11.1.

Powerful tools and all the resources you need

The new Windows 8 SDK and Windows Dev Center provide everything you need to start building your apps. The Windows 8 SDK includes free versions of Microsoft® Visual Studio 11 Express for Windows 8 and Microsoft® Expression Blend® to jumpstart your development. The Windows 8 Dev Center provides access to hundreds of sample apps, documentation, tutorials, and guidance from the experts.

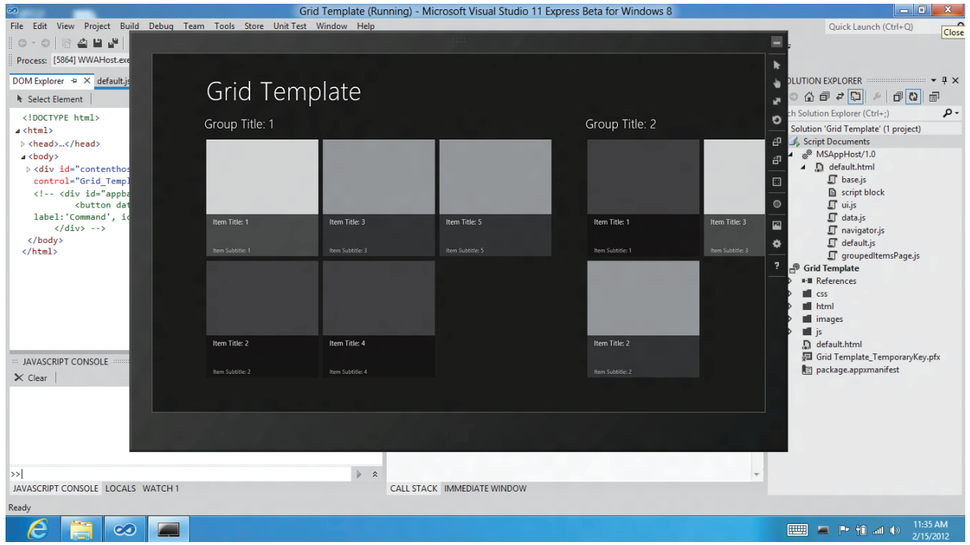
The Windows SDK for Metro style apps provides a complete development experience. It includes only the tools and resources you need to get started quickly. Samples and documentation have been moved online to minimize download time. The WinRT API surface has been optimized to simplify development. And the inclusion of Microsoft® Visual Studio 11 Express for Windows 8 and Microsoft® Expression Blend® provides you with first-class development and design tools for Metro style app development.

The Assessment and Deployment Kit (ADK) helps you measure system performance to ensure that the software and hardware you develop is of the highest quality.

Microsoft® Visual Studio® 11 Express for Windows 8 is a free, lightweight version of the powerful Visual Studio integrated development environment (IDE). Visual Studio Express is packaged with Microsoft Expression Blend®, which now also helps you work with HTML5 and CSS3. Blend provides access to Windows controls and an integrated tool to profile user interfaces.

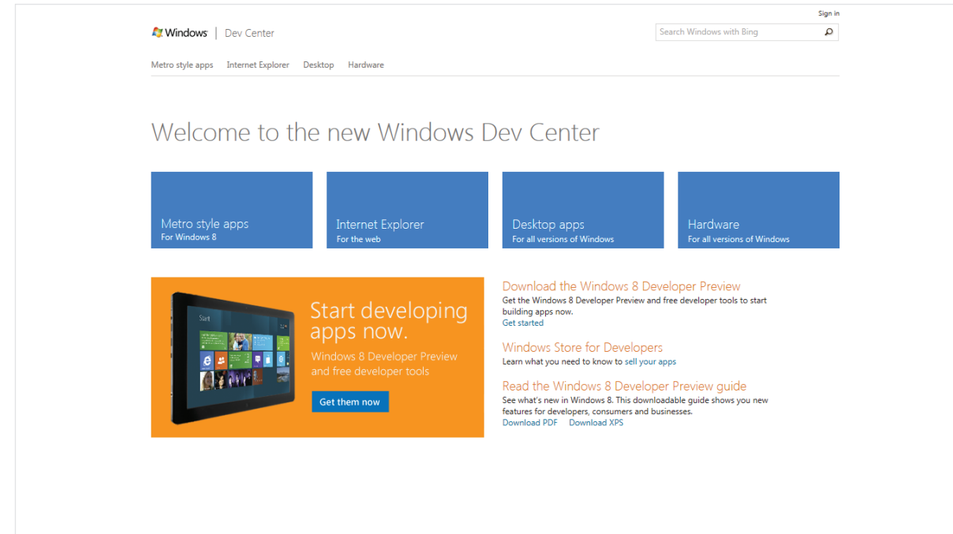
The Windows Driver Kit (WDK) now integrates with Visual Studio® Professional or Ultimate editions to provide a full set of tools and interfaces to help you write, build, compile, sign, test, debug, and verify drivers, along with tools to port your existing driver files to new Visual Studio projects.

A library of templates is included in Visual Studio® 11 Express for Windows 8 to speed up development of your Windows 8 app. The templates include common layout and interaction models, including fixed layout, grid app, navigation app, and split app. With Windows 8, your apps get a predictable, Metro style UI using Windows 8 controls. The controls are designed to work equally well with touch devices or mouse and keyboard. Using Windows 8 controls and templates, your apps will convey the Windows personality with an intuitive and consistent user experience.



Visual Studio templates jumpstart your app development process and help you build Metro style apps quickly

A new, unified Windows Dev Center (http://dev.windows.com) brings together all the necessary tools, reference content, code samples, how-to information, and community forums that you need to quickly get up and running with Metro style apps, desktop apps, or driver development. The Windows 8 sample gallery includes hundreds of samples demonstrating the breadth of the development platform, including nearly every developer feature included in Windows 8. Community members are encouraged to add their own code samples to the Samples Gallery.



The new Windows Dev Center

Line of business app development

Enterprise developers can create Windows 8 apps that are critical for their business and feel confident that they maintain control over the deployment and access to their apps. Businesses can directly sideload their Windows 8 apps onto their Windows 8 Consumer Preview domain-joined PCs, bypassing the Windows Store.

An app created in an enterprise can stay within the corporate firewall and be centrally managed, updated, and distributed. IT Pros can disable access to the Windows Store by using Group Policy and specific apps within the Windows Store can be allowed or blocked by using AppLocker®.

Windows 8 retains the power and flexibility of the Windows desktop. Many of the innovations that were included in Windows 7 are also available in Windows 8, from Jump Lists to Snap. The majority of your existing line-of-business apps that run on Windows 7 will also run on Windows 8 (32-bit and 64-bit versions).

Hyper-V

Microsoft® Hyper-V® on Windows 8 is a flexible and robust client virtualization technology that enables enterprise developers to test multiple configurations of apps and operating systems on a single PC instead of each configuration requiring its own PC. On editions of Windows 8 that support Hyper-V, IT Pros can test and manage multiple environments from a single PC, perform app compatibility tests, or test without risking changes to a PC that is actively in use. Hyper-V supports both 32-bit and 64-bit versions of Windows, and IT Pros can manage their client virtual machines seamlessly.

Broad reach, flexibility, and transparency of the Windows Store

Windows 8 and the Windows Store make it simple for millions of customers to find, try, and buy high-quality, certified apps from practically anywhere in the world. The Windows Store makes it easy to distribute, update, and get paid for the apps that you develop.

Selling in a global marketplace

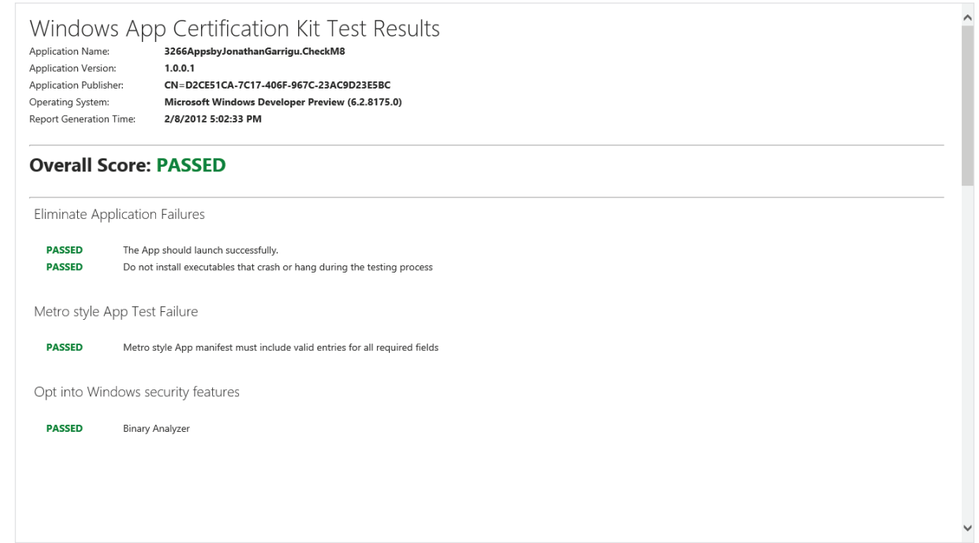
The Windows Store supports the distribution of free and paid apps in hundreds of markets worldwide, so most customers can find and install the apps they want in the language of their choice. The Windows Store supports market-specific catalogs, tailored for customers in specific locales, as well as market-specific payment providers. You can choose the catalogs in which your app is listed.

Flexible business models

The Windows Store provides you with the freedom to choose the business model that's right for your apps. The Store provides full platform support for free apps, trials (both time-based and feature-based), and paid apps, as well as in-app purchases. You're free to manage customer transactions directly using your own or third-party services for in-app purchases and subscriptions, or use the services provided by the Windows Store. For apps that are supported by ads, you're free to choose the ad platform that best meets your goals.

Transparent terms and onboarding process

To help ensure predictability and eliminate uncertainty, app certification requirements are provided in plain language. The Windows App Certification Kit lets you test your apps for many issues prior to submission. If your app is rejected, you'll get useful feedback so you can address the issues quickly and resubmit your app for publication. And you'll know where your app is at every step of the certification process, from upload to final certification and acceptance, using the dashboard.

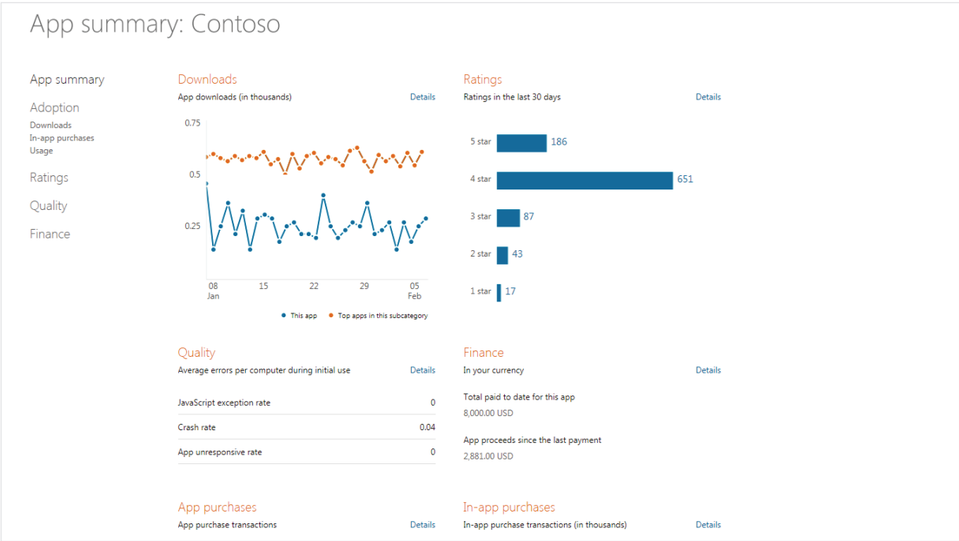


Test your apps and find issues before uploading them to the Windows Store using the Windows App Certification Kit

Your personal app dashboard

The Windows Dev Center provides a dashboard that includes many ways to improve your apps by monitoring their success. View reports on downloads, revenue, aggregate usage, in-app transactions, customer ratings, market trends, and crash and hang data.

You can access reports and telemetry data that show failure-based and cause-centric data and that indicate how reliable your products are in the field, including how often they crash or hang. You can also compare how well your app is doing in terms of sales, downloads, and usage compared to other similar apps (no personal or company information is revealed). These new reports are consistent and actionable so you can find issues quickly and efficiently.



The Windows Store dashboard includes all the tools you need to monitor your app's success

Designed for discovery

The Windows Store catalog is indexed by search engines, so apps are easy to find. Web search results point to a web version of the app listing page, which is based on the same content as the Store listing. Promoting apps from your website is easy. In fact, with just a line of markup, you can promote your app through the app button within the browser, visible to anyone running Internet Explorer 10 Consumer Preview on Windows 8.

Best economics

Windows 8 represents the single biggest platform opportunity available, and business terms of the Windows Store represent a developer-first point of view. With access to millions of potential customers around the world, development choices that let you use the skills you already have, rich platform capabilities for building Metro style apps, business terms that maximize your revenue opportunity, and flexible business models for the apps you create, Windows 8 and the Windows Store provide an unprecedented opportunity for you to imagine, build, and sell your apps.

Windows 8 Consumer Preview is here

From start to finish, we've reimagined Windows. It works the way you do and it keeps you connected to the people, websites, and things you love most.

Apps are at the heart of Windows 8. Beautifully designed for your highly-connected lifestyle, apps integrate with the services you already use. Keep in touch with friends, browse the web, and seamlessly store data in the cloud. It's all possible.

No matter how you work and play, you can customize Windows 8 to suit your needs. Whether you use touch or a keyboard and mouse, Windows 8 works the way you want.

Made for business and home PCs, Windows 8 can handle your tasks. And if you're a developer, the Windows Store provides you with an unprecedented opportunity.

Windows 8 is everything you love about Windows—without compromise.